ESTABLISHED 1878.

VOL. XV. CLEVELAND, OHIO, JULY 21, 1892. NO. 30

LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interest of Lake Carriers, and improve the character of the service rendered to the public.

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H. S. Hodge, - -	Detroit.		

CLEVELAND, OHIO.

The *Plain Dealer* done itself proud last Thursday by issuing a 36 page paper commemorating its half century of prosperous advancement. The jubilee issue contained an epitome of the industries of this port such as the Board of Trade is about printing and the *Plain Dealer* statistics will no doubt be embodied in the Board of Trade report.

Captain Geo. P. McKay, has returned from his short vacation taken afloat and is again on deck meeting all that comes along in the interests of the marine.

The steamer Pioneer on her first trip delivered at this port 1,670 gross tons of iron ore, which is over 200 tons more than her owner expected she would carry. She was driven at a very moderate gait during the trip, averaging about 15 miles per hour. Captain White is confident, however, that as soon as her machinery is in perfect order she will exceed that speed by two miles. The working of the Howden forced draft is represented as being entirely successful.

Commodore Geo. W. Gardner has been eminently successful in arranging for a regatta at this port during August. Advices have been received from all the cities along Lake Erie that they will be represented. Buffalo, Detroit and Toledo will have a large number of yachts and in addition the canoe clubs of the various ports and the naptha launches will be invited to enter into competitive races. The date of the regatta has been fixed for August 16 and 17. Cash prizes will be awarded. Commodore Gardner received the following voluntary contributions to aid in making up the purses: W. J. White $100, W. R. Huntington $25, W. J. Akers $25, Commodore Wright, $25, Col. George Worthington $25, Captain Percy W. Rice $25, Dr. E. E. Beeman $25, Commodore George W. Gardner $25, making a total of $275. About $400 more is needed and Commodore Gardner would like to hear from interested business men. There will probably be from thirty to forty boats here. After the races a quadron sail will be made to Put-in-Bay.

The sail yacht Rambler, owned by Mr. L. H. Cowles, left port last week for a Lake Superior cruise. The Rambler is sloop rigged and is a fine seaworthy little vessel having acted splendidly in some hard gales last season.

The steering gear of the E. C. Hutchinsen carried away on her last trip and a very ingenious purchase was rigged up so that the deck engine was utilized to great advantage. Captain Hutchinson owner of the vessel was so well pleased with the improvised steam steering gear that he now thinks of fitting up the new purchase as a stand by. The River Machine & Boiler Works, makers of the deck engine will probably get out the necessary connections.

Captain Dunham, of Chicago, was in the city for a few days this week.

F. A. Kirby, superintendent of the Wyandotte shipyard, was in the city for a couple of days this week, leaving for home Wednesday night. Mr. Kirby, was very unwell during his stay being unable to leave his hotel though it is hoped that careful home treatment will pull him "to windward" again all right.

The schooner Massasoit, is receiving a new foremast at this port.

The new steamer John B. Ketcham, built at Toledo, is being surveyed to day by Joseph R. Oldham for classification in the Inland Lloyds.

The local inspectors for this district are probably the most industrious and busiest men in the service. Steamers inspection papers expire during the balance of the month as follows:

July 23 Titania,
July 23 Italia,
July 27 George Spencer,
July 27 Kittie Downs,
July 28 Louisa,
July 31 Empire,
July 31 Farragut,
July 31 Rajah,
July 31 Roland,
July 31 Roman,
July 31 N. B. Gates.

The Cleveland Ship Building Co. have just received an order from the American Steel Barge Co. for six Scotch type boilers, 11 by 12 feet. They will have corrugated furnaces, steam domes, oval smoke stacks 8½ by 10 feet and be fitted complete for the mammoth whaleback to be constructed for passenger service at the World's Fair.

BUFFALO, N. Y.

Special Correspondence to The Marine Record.

W. I. Babcock, superintendent of the Chicago Shipbuilding Co., and formerly of the Union Dry Dock Co, was in the city last week.

The big steel steamship, W. H. Gilbert, has arrived here on her maiden trip. She is a fine steamer. Her first cargo was 101,000 bushels of wheat, which she carried on a draft of 14 feet. 4 in. Capt. Chamberlain says she averaged 12½ to 13 miles an hour under 120 pounds of steam. Her boilers are allowed 165 pounds, and when working under full pressure she may prove a record breaker.

The American Maid of the Mist was launched complete into Niagara River at a point not far above the whirlpool rapids, last Thursday. She is 83 feet long, 18 feet 6 inches beam and 7 feet depth of hold. She has a double high pressure engine, built by Sutton Bros., of this city, and her boiler was built by Mr. Riter at the Eagle Boiler Works here.

The excursion steamer Pilgrim is the first Buffalo boat to be fitted with an electric search light. The light is of 1,400 candle power and will render objects discernible a mile off. The light is now in position and will be in working order before the end of the week.

The Canadian steam yacht Dixie, having about a dozen people on board was run into and sunk by the Pilgrim in Niagara River last Saturday. No blame attaches to Capt. Gilbert, of the Pilgrim, as Louis Harbrecht, who had the wheel on the Dixie, was said to be drunk at the time and stopped his boat while crossing the Pilgrim's bows. If Harbrecht was not drunk when the collision occurred he certainly was when seen by your correspondent a few minutes after the accident. Had it not been for the timely assistance rendered by Capt. McMurray and the crew of the tug International, several lives would have been lost. The Dixie lies in 25 feet of water near the Canadian shore. The matter will be investigated by both the Canadian and American authorities.

Capt. Judd, of the Union Steamboat company's steamer Nyack, has resigned and Capt. Clossey, of the New York, appointed in his place. The New York will be commanded by Capt. Jackson, formerly her first officer

The steamer Emily P. Weed brought down 153,000 bushels of oats on her last trip. Her captain says this is the largest cargo of oats ever brought into Buffalo.

Thomas McGovern, the man whom the lumber shover's union sent to upper lumber ports, returned last week and reported that he had the promise of the lumber shovers at Menominee not to load the Pawnee and barges unless the unloading at Buffalo was to be done by the union. The union were correspondingly jubilant, but their joy was short lived, for when the owners of the Pawnee were advised of the condition of things they advised their agent at Menominee to tie up the boats if the union would not unload them unconditionally. The union weakened and the steam barges are now on their way down, and will be unloaded by the stevedores.

The steamer Nyack will have repairs completed in time to start on her regular trip July 21st.

Coal freights weakened Monday under a heavy supply tonnage, and rates to Superior and Manitowoc dropped five cents, to 30 and 55 cents respectively. Chicago and Milwaukee rates are materially weakened, though as yet unchanged. Canal rates are stronger and business on this waterway appears to be picking up a little.

CHICAGO, ILL.

Special Correspondence to The Marine Record.

The coroner's jury returned the following verdict in the case of the mate of the Middlesex: "That Robert J. Walker came to his death from drowning in Chicago river caused by being pushed over board by some person unknown to the jury and we recommend that said unknown person be apprehended and committed to the County jail until discharged by due course of law.

Your correspondent attended the inquest and reviewed the body of the deceased, and for the information of any relatives or friends whom he may have left behind I give the following description of him. He was a man of medium height, weight about 150 pounds, age about 28 years, fair complexion, prominent nose, blue eyes and brown hair and mustache, a good looking well-built man.

Capt. Morrow, of the Middlesex, says he was a thorough sailor and knew and did his duty skillfully and well.

Capt. John Kelley, owner of the barge Middlesex, had the remains of mate Robert Walker buried at Forest Home cemetery on Friday. It is stated that the deceased belonged to Norfolk, Virginia.

Capt. H. W. Blend has been appointed master of the steamer Carrie Ryerson.

Grain freights on Tuesday ruled at 2 cents on wheat, 1¾ cents on oorn, 1½ cents on oats. On Monday Capt. John Prindiville chartered the steamer Brittanic for wheat to Buffalo at 2¼ cents per bushel, and the schooner Sunrise at 1⅝ cents on clipped oats to Buffalo.

Capt. Harry Williams purchased the schooner Surprise last Friday from Capt. Henry Channon, consideration $3,500. Capt. Harry Williams will command her and Capt. Edward Oleson, who commanded the Surprise will command the schooner Eveline, which Capt. Williams resigned.

(*Concluded on page nine.*)

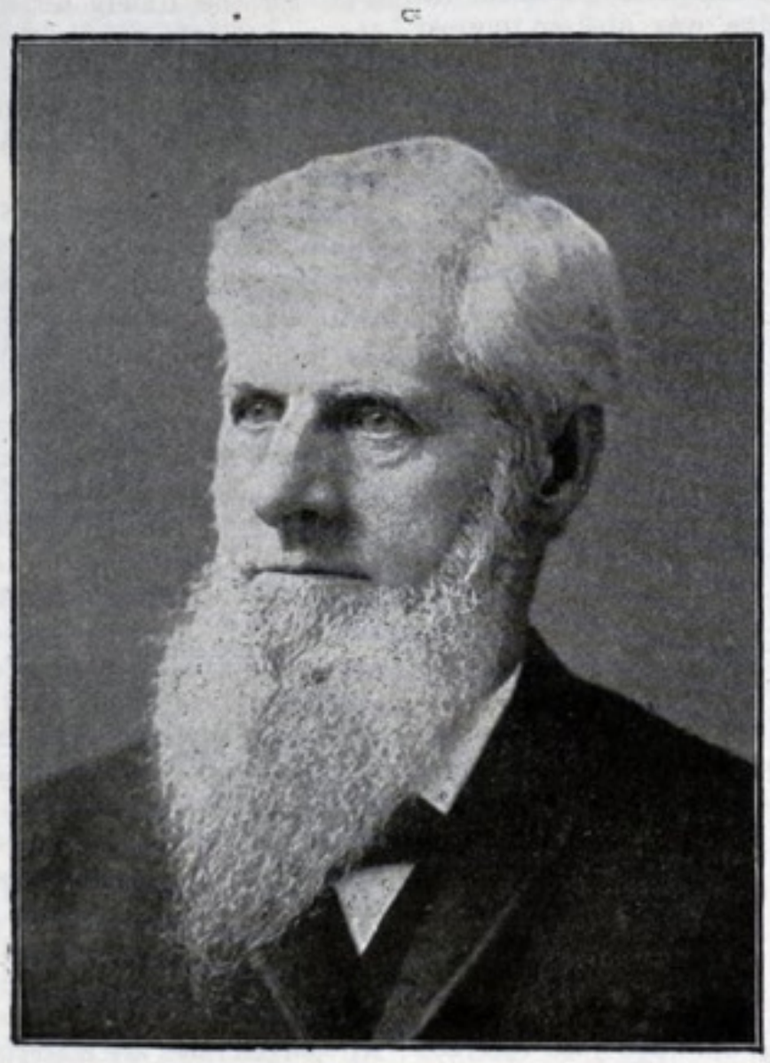
A PIONEER LAKE SHIP BUILDER.

The accompanying portrait of Mr. David Bell, of Buffalo, N. Y., will be recognized by marine men at every port on the lakes.

In 1861, Mr. Bell began to build to the order of Messrs. J. C. & E. T. Evans the first iron propeller launched on the lakes, the Merchant, of 720 tons burthen, closely followed by the Philadelphia, and they proved worthy pioneers of the now splendid lake fleet of iron and steel propellers.

Mr. Bell was not only the pioneer in the building of the first iron propeller on the lakes, but is also credited with the construction of the first tug boat, the first marine engine for propellers, the first elevator engine, the first locomotive engine, and the first and only iron revenue cutter built in Buffalo, so that the "Queen City" is honored by the residence of her worthy pioneer in mechanical pursuits, who is still in active service and cutting a "wide swath" in the manufacture of his latest invention and pet, the steam hammer.

In giving a brief synopsis of the career of David Bell, we note first that he was born in Amesfield, Dumfriesshire, Scotland, December 7, 1817. At the age of 25 he came west, and was first employed in the South Boston Steam Engine Works at a wage of $1.50 per day. In 1842 he was engaged by the Buffalo Steam Engine Works, and later in the Cuyahoga Steam Works, Cleveland, O., subsequently returning to Buffalo, where he entered into business for himself, and through sheer force of merit established an important and prosperous manufacturing business.



DAVID BELL, BUFFALO, N. Y.

The typical characteristics of "the natives of the heather" stand out boldly in the career of David Bell, and from assisting to build the steamer Hercules in 1842, he persevered until he became an acknowledged authority in shipbuilding, machinery and general mechanical devices. Reared in the vicinity of the historic locality made memorable by being the birth place of Burns, Scott, Cunningham and other distinguished authors, the subject of our sketch, while studying hard in the field of mechanics, has yet found time to contribute a number of interesting technical articles to class periodicals and the daily press, while entering largely into several enterprises having for their object the technical, moral and social advancement of the community.

Largely through the efforts of Mr. Bell the Mechanic's Institute, of Buffalo, was formed in 1865, and he inspired others with his confidence to such an extent that the enterprise was incorporated four years later and under its auspices an international exhibition was held which proved a financial success, and set the organization securely on its feet and resulted in the reelection of Mr. Bell as president of the Buffalo Mechanics' Institute for a second term. He is also a life member of the Young Mens' Association, of which he has served as president, and done much to promote its healthy maintenance. As president of the Grand National Curling Club he was the recipient of a valuable testimonial from the Society in recognition of his honorable and faithful service as its chief officer. He is also a member of the St. Andrew's Society, and of most of the Scottish organizations in the locality of Buffalo.

Mr. Bell is a Republican, but is not an active partisan. He never has sought or accepted public office, regarding the duties thereof incompatible with the successful management of business. He has been twice married—his first wife being Miss Adams, of Buffalo, who bore him several children, only one of whom survives, and she is the wife of C. S. Gzowski, a resident of Toronto, Ont., who, with his father, Col. Gzowski, were the contractors for the International Bridge. After the death of his first wife Mr. Bell married Mrs. Jane Reed in 1874, by whom he has twin sons.

The artist has given a faithful delineation of Mr. Bell's features, which are strongly Scottish. He stands six feet in his stockings, has an erect figure, and a muscular and well developed frame. Although he has entered well on the seventies, he is as lithe and active as many a man of thirty, and gives promise of many years yet in active business pursuits.

An order in council has been passed by the Dominion Parliament allowing rebates on canal tolls on grain shipped from American ports to Lake Ontario, passing through the St. Lawrence canals and exported from Montreal. Heretofore rebates were only allowed on grain shipped from Canadian ports. This, however, has no bearing on the transhipment at Ogdensburg of western grain which still remains liable to full tolls.

ENMITY TO THE DEATH.

One of the most disgraceful acts ever perpetrated on the docks at Chicago, occurred as we want to press last week. R. J. Walker, mate of the schooner Middlesex, was knocked into the river at the lumber market last Thursday just as he was leaning over on the dock to throw off a line. His assailant rushed through the crowd and escaped. Although hundreds of people were on the dock at the time, not one ventured to assist Capt. Robt. Seator, of the schooner Lotus to throw a plank to the drowning man. "Served the scab right," went up from a crowd of union sailors on the dock. After a desperate struggle Walker sank in plain view of 100 people. The body was recovered one hour afterward and taken to the morgue, where an inquest was held. John G. Keith, of the Lake Carriers' local committee at once placed information of Walker's murder in the hands of the police, and it is expected the murderer will be captured, as the police have a full description of him. Police guard was on the Middlesex at the time, but was in the stern of the boat behind the deck load of lumber. The murder caused great excitement along the river. The dead man was shipped at Tonawanda.

CHEERFUL UNDER THE WEATHER.

Special Correspondence to The Marine Record.

Toronto, Can.—Sailors are used to enduring hardships, but no better specimen of their remarkable stamina and cheerfulness under pain can be produced than Capt. Hugh Rooney, of the Canadian schooner Jessie Drummond. It will be remembered that this gallant skipper was fearfully mutilated at the Fairhaven coal chutes some weeks ago. A shipmate in the craft went to see the injured mariner, shortly after the surgeon had got through patching the smashed captain up.

"Hello," cried the visitor, in a jovial tone to encourage the sufferer; "you've had a pretty good knock out this time!"

"Aye," answered Captain Rooney, with as much of a grin as his lacerated face would permit; "but I'm still in the ring."

Another nautical friend called on him, and as this consoler turned his glance upon the recumbent captain his eyes betrayed somewhat his thoughts. Before he could formulate a suitable condolatory sentence, Skipper Rooney called out:

"A nice looking dude I am now, eh?"

And he said this in such a comical vein that the ludicrousness of the allusion and the serious situation caused the would-be commiserating sailor to burst into a roar of fun.

The first mate of the schooner Jessie Drummond called up Cobourg, where lives the torn-up man, by telephone recently and asked how Capt. Rooney was progressing toward recovery. The skipper was then upon crutches and would hear of nothing short of going to the telephone himself.

"How are you coming up, captain?" asked the mate.

"Famous," returned Capt. Rooney; "but you'd laugh to see me getting around with these two sticks. Were they only made fast to me, I could stow a main sail myself. I have weathered the gale and will be refitted in a week or two."

It is a pleasure to state that Capt. Rooney has so far got into shape that he will be able to resume command of his vessel on her next trip to Fairhaven from Toronto. The surgeon who attended him states that he has a remarkable constitution, or he should never have pulled through. He will be as sound as ever, excepting for the specks of coal dust which cannot be removed from the pores of the skin of his face.

J. A. C.

THE HARBOR JURISDICTION AT CHICAGO.

Secretary Foster,s bill, by which the United States takes ditect charge of Chicago Harbor, is well received by marine men. The government has spent several millions of dollars in building the harbor of refuge off the Lake front, but at present there is no way to control tho movements of boats within it. If a vessel anchored directly in the course of boats and in the fairway of the harbor, there would be no way under the present system of affairs of causing her to move. For years the government and city authorities have been endeavoring to drive out bumboats which are anchored along the outer piers, but have no way of accomplishing it. The bill, if passed will give the government officers power to regulate the anchorage of all boats in the basin, and objectionable craft can be summarily disposed of.

COLUMBIAN EXPOSITION NOTES.

Special Correspondence to The Marine Record.

Of all the departments of the Columbian Exposition which with their simultaneous opening for exhibition to the eyes of the earth's millions (on May 1st next) an array of the works of man never even approached heretofore no branch, or more properly speaking, no main feature of the Fair will be of such absorbing interest to the readers of The Marine Record as the marine department occupying half of the immense railway and transportation building. This building is about completed in its entirety and is so well adapted to its intended uses that there comes to the mind of the beholder at once a realization that it is not only the product of many hands but of the brains of many men whose practical knowledge of the thousands of things maritime have made it possible for them to plan and erect, not only a palace in appearance, but also a building where for everything that could tend to aid in a grand display effectually there is absolutely little or nothing left to be desired. Your readers have seen many pictures of the building and space will not permit of my going into details at length.

Among the striking features of this building the great golden door, as it is termed, is perhaps the most fetching as it seems to fetch from every beholder exclamations of delightful surprise and when treated in its entirety in gold leaf, as it will be, it will indeed be a thing of wondrous beauty. About its high arches, which seem by comparison with surrounding objects to rise to Empyrean heights are elegantly wrought designs in relief of all the vehicles of transportation from the carts of the ancients up to the Pullman palace car. And over the crown of the lower door, in heroic proportions stands the most marvelous of all the designs, the Genii of transportation before which one may well pause in admiration of the skill of its creator.

A number of pieces of statuary for use in or about this building are completed, though not placed. One of a pilot at the wheel in the position of holding her steady and with eyes looking well ahead is quite true to life. Another is that of a brakeman standing brake in hand in the act of setting it, and almost involuntarily one listens for the accompanying noise so lifelike is the figure. There are statutes of Watt, Stevenson, Fanklin, Fulton, Ericson and other bright lights of the past who each in his own peculiar field of labor achieved undying laurels.

The main entrance of the building fronts on a beautiful lagoon of no small expanse which reflects on its mirror like surface the front elevations of the several buildings that rise from its banks. Many articles such as steering wheels, anchors, cable chains, windlasses, oars, canoes, etc., etc. will be used in the general decorations of the interior of the building. Col. A. C. Baker, Superintendent of the Marine Division escorted a party consisting of Sir Henry Truman Wood, Secretary of the Royal Commission of England, Col. Grover of the Royal Engineers (he by the way has the entire charge of the erection of the English Government building, the location of which immediately on the lake front is said to be the finest of all the plats of ground allotted to foreign governments.) James L. Taylor, foreign agent of the Pacific Railroad and the writer about the various buildings. The foreigners of the party had only pleasant things to say of what they think will unquestionably be an exhibition overshadowing in all its vastness its many predecessors.

As a climax to our tour of inspection Col. Baker accompanied by President Baker and a number of others who had fallen in with our party over in the Forestry building, piloted us on to the center of the vast acreage of flooring soon to be covered by the immense iron roof of the Manufacturers building, the largest on the grounds. Standing as we stood and raising the eyes skyward one for the first time realizes what is meant by the word gigantic as applied to a building; the arches hundreds of feet apart at their base spring up and over an arc so wide and high that the Tower of London, as Sir Henry Wood stated, could be trotted through the center aisle of this building and never touch it. The Auditorium at Chicago, looked upon as a mammoth structure could be moved down along and through the main aisle of this building without taking its hat off, if it wore one.

Now reader, if you are a manufacturer of anything nautical, take my advice and if you have not already done so, make application at once for space to exhibit same. It is not yet too late, but it soon will be. You won't be lonely for company. Among the prominent displays promised is one by the Sheriff's Manufacturing Co., of Milwaukee, Wis., the main feature of which will be a column composed of propeller wheels rising one on another from one of immense diameter to a very small one at the apex and the entire column will be so arranged by twisting as to give the blades of the wheels the appearance of a thread on a screw. The writer anticipates the honor and privilege through his (Beeson's) Inland Marine Directory of representing to the visitors at the Fair who may be interested in our inland seas the commercial interests of the lakes, in the 6th annual edition of the work which will be exhibited, sold and entered for competition at the exposition.

Harvey C. Beeson.

The Murphy Wrecking Co. has contracted to raise the steamer Progress for $13,000. The Detroit Dry Dock Company bought the wreck as it lies in the Detroit River for $11,500.

A NEW VESSEL CONSTRUCTION FOR HANDLING BULK CARGOES.

(A LETTER FROM THE INVENTOR.)

CLEVELAND, O., July 18, 1892.

To The Marine Record.

So much has been said concerning the purpose of the formation of The American Water Transportation Co., and so many comments passed regarding the practicibility of my invention that I have decided to comply with your request and make a preliminary statement of the same. I will furnish for the public, drawings and specifications for both plan No. 1 and No. 2 at no distant date, you are acquainted with my reason for withholding the same at this writing.

PLAN NO. 1.

consists in a series of oscillating pockets adjacent to each other filling the carrying space in the hull of the vessel of any form. The discharge from the pockets is under the control of the vessel's engineer. The material is discharged from these pockets at their bases into a line conveyor, which in its turn discharges into the elevator at its lower extremity in such a manner as to prevent accumulation and clogging.

A contemporary has said that the discharging is done by a "continuous belt system after the methods in use in grain elevators." This is a mis-statement, any well informed mechanic would readily see that it would be an impossibility to properly handle such bulky material as bituminous lump coal on a belt system. The system, which is used in the conveyors will readily handle grain, but as before stated grain conveyors will not handle coal. The conveyors proposed for use in my system consists in a series of conveyor pans with wheels running on a track which carries the material instead of dragging it. How much easier is it to wheel two hundred pounds of anything than to drag it? The elevator is so constructed that there is no point at which the material can clog from the time it is received from the conveyor until it is finally discharged into the tube which carries the material to the point desired.

In the handling of coal Plan No. 1. is intended principally for harbor services, where it is a benefit to be able to discharge a portion of the contents and accurately weigh the amount discharged. In other words plan No. 1 contemplates an improved lighter for fueling other vessels with accurate weight more rapidly and economically. On the lighters for doing this work as at present constructed, the method is slow and the weight uncertain.

Having given a brief description of plan No. 1, and digressed somewhat into a general description, I will make brief mention of

PLAN NO. 2.

which is intended for outside service. In this method, the compartments being stationary are so constructed as to form a part of the vessel's self, bound firmly to the hull, thus it not only places the vessel into position to readily discharge herself, but makes the same more seaworthy.

I can prove at the proper time that in the adoption of this method the carrying capacity of a three thousand ton vessel will not be reduced to exceed ten tons.

IN GENERAL.

In considering the expense of such an equipment, I desire to say that the earnings of the vessel for the small additional outlay, will be at least 75 per cent.

The system can be readily adopted to any form of hull, making it a benefit to present owners of steam and sailing vessels. In a 3,000 ton vessel the additional expense in equipment will probably not exceed $10,000. The earnings of the equipment will depend somewhat upon the trade in which the boats are running.

A barge using this system can readily jettison any portion of her cargo.

She can discharge at places not equipped with working dock.

She can discharge where the bank or dock is higher than the bulwarks of the vessels.

Machinery taking the place of labor is a great advantage in itself, doing its work surely, it never strikes!

In event of reaching a harbor during a strike, a barge thus equipped can discharge her cargo thus avoiding the usual annoyance and expense of delay.

Fifty per cent is saved in breakage in the handling of coal.

Great time is saved in unloading by use of the machinery.

Material handled while at wharf, at anchor or in transit.

The propeller's engine can be arranged to run the main line shaft which operates the conveyors and elevators. A few words about

THE AMERICAN WATER TRANSPORTATION CO.

This company is formed for the purpose of owning and operating steam and sail vessels, making a specialty of the Briggs system and to construct and equip such vessels for others.

The company is at present offered a steady trade for eastern parties for four barges in which trade an actual interest of 75 per cent on the equipment can be made.

The company contemplates the early introduction of its barges into the eastern trade where as stated a present demand exists, the lake trade forming a question for later consideration.

The company is at present constructing on a true scale and at considerable expense a working plant to illustrate the method of handling bituminous lump coal. This plant will be thrown open to public inspection at the proper time.

AN EMINENT OPINION OF PLAN NO. 1.

Before closing I desire to submit the opinion of an able vessel architect, whose opinion is sought after far and near and cannot be obtained otherwise than by the merits of the invention in question.

F. H. BRIGGS, Cleveland, O.

Having examined the model of your patent self weighing and discharging Barge I may say that I am of opinion that the same may now easily be worked into a rapid and economical machine for coaling vessels, while at the same time the coal, (either hard or soft) is being weighed. As regards the hull, I may state that there will be no difficulty in constructing such a vessel as you require, without the usual beams, the same may be made of ordinary weight in proportion to displacement and the cost should not be excessive. I think your invention is very meritorious, quite practicable and that it will prove to be a very useful adjunct to the owners of steam vessels as a labor and time saving device, as well as a register of quantities.

Yours Truly,

JOSEPH R. OLDHAM.

In closing I thank you for the use of your valuable space.

FRANK H. BRIGGS.

MR. BRIGGS is deserving of very much praise for the contemplation of a subject which is of most importance to the vessel trade. We predict for his invention a bright future, certainly there can be no questioning the opinion of Mr. Oldham, with whom we are well acquainted. (ED.)

LAKE MICHIGAN CURRENTS.

TO THE MARINE RECORD.—In due appreciation of the great interest THE MARINE RECORD has and continues to take in all matters where any improvements may be accomplished in aids to navigation and especially in furthering such measures on the Great Lakes, I again desire to call the attention of your readers to the uncertain or rather undefined currents existing over the lake region.

In a former issue I gave in part my observation of general currents on Lake Huron and I now take the pleasure of giving a brief synopsis of how I have found the surface movement on Lake Michigan. During north and easterly winds, there is, and I presume always will be, a strong set of current commencing at ornear Presque Ile on Lake Huron and passing through the Straits of Mackinac around the head of Lake Michigan northward of the Beaver group, thence along the west shore to the south end of the lake where it forms a circle as it were with the outflow passing along down the east shore to the vicinity of Grand Point Au Sauble, where it again forms a curve to the westward until it meets a north-east sweep of current, thus forming a similar belt to that existing at the head of the lake or the south end. The water in mid lake is almost if not quite stationary.

Under the head of general remarks, from personal observations I may say that lying to an anchor off Chicago during a heavy north-east gale on the east shore, I have found the current so strong to the northward as to set the vessel broad side to the wind and sea. The most dangerous locality to the practical navigator is probably on the track between Poverty Passage and the head of the Beaver Islands as it is necessary to make good courses to avoid the islands and shoals on either side, (herewith find a rough pencil sketch of the water spoken of, showing the currents, eddies and still water as I have found them.

I hope some other masters, pilots, fishermen and others will give or share their views on this subject as it is becoming more necessary than ever that the currents should be thoroughly understood on these Inland seas and by close observation I am convinced the problem can be solved to the satisfaction of the scientific world as well as the lake navigator and as a step in this direction, I hail with pleasure the advent of the bottle system.

C. W. LOCKWOOD.

A NEW FIRE BOAT FOR BUFFALO.

Our thanks are due to Mr. David Bell for an invitation to be present at the launching of the steel fire boat "City of Buffalo" No. 2, on July 18. With the launch of the new fire boat the Bell Steam Engine Works now record 41 iron and steel boats built to order and we opine that Mr. Bell will not feel quite satisfied until he makes it the even half hundred.

The general dimensions of the second fire boat for Buffalo harbor are 84 feet over all, 75 feet keel, 20 feet 6 inches beam, 6 feet draft and 150 tons displacement, Scotch type boiler 11 feet by 11 feet, one pair direct overhead acting propeller engines, diameter of cylinders 17 inches and 17 inch stroke, vertical duplex direct acting pumps, cylinder 17 inches diameter, water 9 inch, stroke 12 inch, capacity of pumps per minute 4,000 gollons, diameter of wheel 6 feet 8 inches. A brisk local competition was entered into for the contract to build the new fire boat and David Bell having built the first boat, secured the contract for No. 2, which is superior in every way to No. 1.

THE steamer Owasco, which went to the coast in the spring of 1891, has been totally wrecked off Halifax, N. S., while no her way from Philadelphia to Montreal with coal.

NEWS FROM THE HEAD OF LAKE SUPERIOR.

THE NORTH-WEST GRAIN OUTLOOK.

Special to The Marine Record.

DULUTH, MINN.—Wheat traffic, both in receipts and shipments, keeps up very briskly for this season. Receipts for the past week have been about 1,000,000 bushels, with shipments of 1,350,000 bushels, having 3,540,000 bushels in store here Monday. Receipts bid fair to continue large for some time, so that the volume of grain to go forward will not be materially reduced before the new crop begins to move. New crop advices are excellent. While the average is less than last year in all the vast territory tributary to Duluth, the conditions are good and the weather is just such as will improve them. It looks now like over 100,000,000 bushels in the area tributary to Duluth and Minneapolis. The flour shipping business is very large and is expected to beat last year's record by nearly 500,000 barrels. General westbound merchandise business is excellent and the iron ore traffic, from this end of the lake at least, is far ahead of any preceeding year. For the first time in the history of the marine business at Duluth there is a large and profitable traffic in lumber, and a traffic that has come to stay. Between 60,000,000 and 100,000,000 feet will be shipped to the east during the year. Altogether the vessel interests have no cause to complain of the volume of business furnished them by the city of Duluth and its suburbs. In amount of out-going traffic the head of Lake Superior, which 20 years ago did no marine business, is exceeded only by Chicago of all American ports, while the value of this traffic to the vesselmen, comes to a parity with the trade of Chicago, it being almost exclusively long haul. These facts are worthy of consideration by the vessel interests, especially when the latter take it into their heads to oppose schemes for improvement at Duluth which will only result in further extensions to the business greatness of the port.

At the Steel Barge Co.'s yard three large vessels are nearing completion. The Pathfinder and consort, for the Mather syndicate of Cleveland and the C. W. Colby owners account. The Pathfinder, which is the largest vessel the company has ever built and a veritable whale, being 340 feet over all and with a 16 foot capacity of 4,000 tons, was launched last Saturday and the consort a week or two later. Both will help out in the ore business of the Duluth and Iron Range Railway to Cleveland. Two smaller vessels have just been laid down at the yard, of the size built last year, making 5 under way at the yard. The big passenger whaleback, of which so much has been said, is so far not out of the modelling room, material for her has actually been ordered, and mould sand models are being constructed so that the ship is surely a go. It will be laid down this fall. The Washburn, built for the Gladstone-Buffalo business, left last week for Buffalo with a cargo of grain, and will sail them to Gladstone for her regular route. The Pillsbury will follow in a couple of weeks. At the shipyard and dry dock about 1,000 men are employed, 50 of whom are in the dry dock. It will be nearly the first of October before this is finished.

The first test of the authority of Duluth's harbor-master came Saturday last when the captain of the Transit Line propeller Empire State was arrested for throwing refuse into a slip. He was fined $10 and $17.50 costs for the offense. Capt. J. W. Miller, harbor-master, who has been in Washington since last fall, was last night ordered home and will return at once.

There is no little rejoicing here over the fact that arrangements have been completed for building a line of modern passenger boats for the Duluth & Buffalo run. Parties here have for several years had correspondence with vice-president Pankhurst of the Globe works in relation to such a fleet, and though they are not themselves in the new deal, they are happy that it is concluded. It is understood the boats are to be 19 mile steamers, and will make the round trip in a week. They will draw a vast amount of rail travel and will put the aids now in the passenger trade where they belong.

CONSOLIDATION OF SHIPOWNING INTERESTS.

The Northern Shipowners' Association, consisting of shipowners in Norway, Sweden and Denmark, held its yearly meeting at Cristiania, Norway, on May 11. The association was organized in 1889, with headquarters at Copenhagen. Since August, 1891, however, the central office has been located at Christiania. The interests of the association are looked after by a Board of Directors consisting of fifteen members and by a Business Manager. The report of the managers submitted to the meeting shows a membership of owners of vessels registering about 615,000 tons, an increase of about 30,000 registered tons over last year.

THE protected cruiser No. 12, now known as The Pirate, will be launched at Cramp's shipyard on August 8. The builders have reported to the Navy Department that she is now about ready, and Secretary of the Navy Tracy fixed upon the date. The Pirate is simply a name given by the builders as she belongs to a class of ships which the laws require to be named after cities. No. 12 is the first and only vessel with three propellers, which must develop 21,000 horse power. Another interesting feature is that she costs Uncle Sam $2,725,000, without armour or guns.

The Marine Record,

ESTABLISHED 1878.

Published every Thursday, at 144 Superior Street (Leader Building,) CLEVELAND, O.

IRVING B. SMITH. }
CAPT. JOHN SWAINSON. } - - Proprietors.

BRANCH OFFICE.
CHICAGO. ILL., - - - 35 Franklin St.
THOMAS WILLIAMS, Associate Editor.

SUBSCRIPTION.

One copy, one year, postage paid, - - - - - $2 00
One copy, one year, to foreign countries, - - - $3 00
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CLEVELAND, O., JULY 21, 1892.

OUR thanks are due to the Hon. Charles H. Tupper Minister of Marine for a copy of the twenty-fourth annual report of the Department of Marine for the fiscal year ended June 30th, 1891 and printed by order of Parliament.

THE managers of the Line boats trading to Chicago find it more economical to employ lighters than to send the large steamers poking round the creek. The experiment of lighters was first tried by Agent MacMillan, of the Western Transit Line, when it was found that it was far cheaper to send freight up the river from downtown docks by a lighter than it was to haul big steamers around the crooked channel, and the Lehigh Valley now adopts the same plan. The great gainer from the new system is the public, as the bridges are saved many swings on this account. There is also a material saving in time to the boats, which more than repays the cost of running the lighter. Hitherto lighterage has not been used on the lakes to the extent that one would suppose though it may be that it is yet a coming factor in the transportation industry.

HARBOR REGULATIONS.

The Collector of Customs, at Chicago, has just reached a conclusion regarding the jurisdiction which a port should have over its own harbor and in a letter to the Secretary of the Treasury he points out that great confusion exists in the minds of the public at large, of vessel-owners and various officials as to the authority which should be exercised. The harbor of Chicago, he says, consists of several distinct and detached portions—Chicago River, Harbor at South Chicago, and the outer harbor, or lake basin, the conditions of each differing.

There have been many schemes to obtain possession of the outer harbor or lake basin for private uses, etc., one party thinking seriously of building a large amusement hall, floating it to a suitable place in the basin and timbering it down to the bottom, thus making practically a permanent structure.

During the World's Fair, he says, these schemes will multiply, and there will be besides, an immense increase of the ligitimate uses of the basin for anchorage of vessels and as a means of water communication to the Fair.

The unsettled state of affairs on the lake front is largely due to litigation now pending in the United States Court, in which the State, the Illinois Central Railroad and the General Government are parties. In view of the magnitude of the interests involved, and the safety of the great number of lives that will, under existing circumstances, be in danger on the lake front during the Fair, he feels it is a duty which the City owes to the tonnage frequenting the port, to define and establish an anchorage ground for vessels in the waters mentioned; to adopt suitable rules and regulations thereto, and to take all necessary measures for the proper enforcement of them. Their violation is to be made punishable by fine or imprisonment.

DEFINE THE HARBOR LINES.

With the now rapid development of commerce on the Great Lakes there is more reason than ever for officially determining the harbor lines of even the unimportant ports. The day is not far distant when every foot of lake front in the vicinity of shipping points will be eagerly sought after, and from a financiering point of view it would seem a most valuable investment for a syndicate to purchase at the present time all available water frontage adjacent to lake ports. The riparian rights of such valuable property once acquired, would mean considerable adjusting, if not litigation, to fairly compensate owners for land that might be desired by the Federal Government in the future, and which, at this date, could probably be included at many minor ports in the harbor lines. We have this feature in view because a lesson has already been taught in the endeavor to locate a life-saving station at Ashtabula, where not even enough land could be obtained to erect the necessary dwellings, boat houses, etc.

It is not usual to call for or hold a survey to establish harbor lines unless special circumstances arise wherein the municipal or Federal authorities are appealed to, but there can be no doubt of the wisdom of establishing harbor lines at each and every port now in use, as well as at those points likely to become important shipping places in the near future, and there are many such on the coasts of the Great Lakes.

By the establishment of such lines of demarcation it would not follow that improvements need take place, or that any undue friction or interference should obtain with the holders of adjacent property, only in so far as the future conservancy of the port might demand, and it is on these grounds alone that we would advocate the defining of harbor lines for the general good and welfare of future interests.

Much unpleasantness has already eventuated at lake ports on account of this very feature. Such is not the case, however, at ports on the sea-coast, simply because such lines have been established and private interests dare not encroach thereon, and it is a foregone conclusion that a most valuable work might at this time be carried out on the Great Lakes, if the Secretary of War would but authorize a survey of all those ports whose harbor lines are neglected or unknown.

CASUALTIES OF THE WEEK.

One of the sevesest midsummer storms that ever swept over the lakes began on Friday night at 8 o'clock. The wind continued to increase in violence until 2 o'clock Saturday morning, when it blew almost a hurricane, without, as far as we can learn, any adequate forewarning of its violence being even surmised. On Lake Ontario the schooner Lady McDonald, of Kingston, was blown ashore near Fair Haven, and will become a total loss. The tug Chieftain, with four coal laden barges in tow, bound for the St. Lawrence river, unnertook to make Oswego for shelter. The tow line parted and all the barges went ashore a short distance east of the harbor. The tow of five barges belonging to the tug Wilson broke away rrom her fifteen miles from Kingston. The tug Proctor lost her tow at 2 o'clock in the morning off Charlotte.

In the same gale the schooner General Burnside foundered about four miles northwest of Cleveland harbor. The Burnside left that port Friday night, coal laden for Lorain, and during the evening was forced back, and while attempting to make port she sprung aleak. The tug Gregory went to her assistance, and was just in time to save the captain, his wife, and daughter, and the crew. A little later the schooner went down leaving the tops of her spars above water. The Burnside was an old boat, and was owned in Port Huron. She represented byegone tonnage, having been built by John Oades, at Wolf Island in 1845 so that she had entirely outlived her capacity, which was only 292 tons.

The barge H. J. Mills drove ashore 18 miles east of Charlotte, on Lake Ontario, and the tugs Proctor and Wilson went to her assistance. Capt. George McLeod is there looking after the interests of the undrwriters. The mill is owned by Hall & Co., of Ogdensburg, is rated A2, and valued at $18,000.

The schooner Bay State, of Chicago, which went on Bark Point last Tuesday in a fog, was released and taken to Manitowoc for repairs by the tug Monarch. She is not badly damaged. The Monarch has libelled her for wrecking expenses in a previous stranding.

The loss of life during the gale has been small though excursionists Rudolph Blaser, George Boitard, Maggie Meecham and Anna Dillon, of the Mattawas Hotel, at Kingsville, Ont., went out on the lake on Friday evening in a small row boat, all but Blasser being drowned. He was picked up by the barge Cumberland.

The schooner Anna Maria reached Sheboygan, Wis., badly used up, on account of the gale. She was caught off St Martin's Island, and her bowsprit jibboon, and foretopmast were all carried away together with the canvas.

The tugs Onaping and Cora Smith were towing a raf of 4,000,000 feet of logs off Middle Island on Lake Huron when the storm struck them. The Smith's line parted, and, catching the rudder, broke it. The Onaping was then forced to let go, and both tugs shaped a course for Alpena, where the Smith was repaired.

In the gale the steamer Charles Hebard parted her tow line, going into the harbor of refuge at Sand Beach. Her consorts swung on each side of the south pier. The Wilson got out a line and hung to the pier until released. The Aloha drifted outside and stranded on the rock at the lower end of the harbor where she soon filled. The boats were coal laden.

On Lake Michigan the northwester of Friday night was the hardest gale that has visited the lakes in years, and a long list of wrecks was the result, although no lives were lost. The Chicago fleet escaped remarkably well, and with the exception of two scares over excursion boats the storm did not cause shipping much trouble. The excursion steamer Nebraska was many hours overdue on account of breaking her air-pump in midlake at the height of the storm, and for some time she rolled about completely helpless. The hundred passengers on board who had been attending the celebration at Ludington were badly scared, but at length repairs were made so that the steamer could continue on her way, using only her high pressure cylinder. This was slow work, and she did not reach Chicago until 4 o'clock on Saturday morning, having been twenty hours in coming 140 miles. The old schooner Cuyahoga reached port with considerable water in her hold, owing to her pumps giving out during the storm.

The schooner Gilmore reached East Tawas, Mich., with both topmasts and her forward rigging carried away. The Mackinaw and another scow loaded with telegraph poles for Monroe also reached that port.

The schooner Skylark, coal laden for Chicago, sprung a leak while at the foot of Lake Michigan and was towed to Chicago by the Grummond Line wrecker Manistique.

The old whaling bark Progress had a narrow escape from being wrecked while being towed by the Brittanic, which stranded on Milwaukee South Point. The old whaler was drifting directly on the beach when her anchor was let go and she found good holding ground. The Brittanic was released early next day.

The steamer R P. Flower, bound down, ore laden, struck the rocks in the channel abreast of Waugoshance Thursday afternoon. A heavy sea was running at the time, and she struck forward. Her bows were stove in, and although the pumps were set to work, the water gained on them and the steamer was run on the beach at Mackinaw City. There is usually 18 feet of water where she struck. Her consort, the Tokio, continued down under sail. The Flower is owned by Frank L. Vance and others, of Milwaukee. She registers 1,165 net tons, is valued at $100,000, and is probably fully insured.

The three-masted schooner Cheny Ames, of Chicago, Capt. P. Myers, struck the south pier in entering Muskegon on Friday. The schooner sank abreast of the life-saving station in the channel, but not obstructing the passage. The Ames is owned by her captain, and is valued at $9,500; insured for $7,000. She was loaded with stone for Portage, Mich.

The steamer Hunter arrived at Manistique on Saturday with the crew of the Steamer Nelson Mills. The Mills had left that port for Detroit. When just off Naubenmay she was driven on a 10-foot shoal and at once filled. The crew were in a very perilous position when the Hunter was sighted They were rescued with difficulty. The wreck was then towed to three and one-half fathoms of water, where the anchors were let go.

The Canadian schooner Gulnair went ashore a quarter of a mile east of Ashtabula about 1 o'clock in the morning. She filled with water and is a total wreck. Her crew were taken off by a tug at 9 o'clook. The steamer Clinton also arrived in Ashtabula with about four feet of water in her hold. She would not have weathered the gale outside an hour longer.

The large propeller Gettysburg lost a raft belonging to Alger, Smith & Co., in the gale, which went ashore at Lynn's anges, Point Edwards, and was badly broken up.

While trying to make the harbor at Ludington, Mich., the schooner Mars went on the beach just north of the pier, about 100 feet from the shore. The crew were safely taken off. A heavy gale was blowing from the northwest, and a tremendous sea running, which will break up the stranded boat.

A NEW LAKE SUPERIOR SHIPPING PORT.

The opening up of a new shipping port indicates an increase of lake transportation and when coupled with the largely increasing commerce of the older ports goes to show that the transportation industry on the Great Lakes is not yet fully developed.

The work in connection with the construction of the Duluth & Winnepeg Railway Company's ore dock on Allouez Bay, Lake Superior, is now being pushed with energy. The dredges employed in making a deep water channel into the bay from the ship channel in Superior Bay have cut through the wide bar and sandy point and are advancing into Allouez Bay. The railway approach to the dock from the mainland is nearly ready for the track layers, and the pile drivers at work on the shore end of the dock will soon have the first section ready for the superstructure. Floating pile drivers, after the dredges are fairly into the bay, will be taken in to assist in driving the foundation for the dock, while the dredges will be at work on the deep water channel on the other side. These channels alongside the docks will be 1,000 feet long. The storage capacity of the docks will be 198,000 tons of iron ore. The railway tracks above the ore pockets will be over fifty-two feet above the water level. The pockets will be twenty-six feet deep and their bottoms will be twenty-six feet above the water level.

The opening of Allouez Bay, to commerce in connection with the construction of the ore docks, is the opening of a good harbor at the head of navigation. The bay in itself is over two miles long and at its inlet it is nearly a mile wide. Although the approach into the bay is through a sand bar inside there is a fair average depth of water and the dredging necessary to be done does not require much hard labor. Another great advantage attached to Allouez Bay is, it is protected from all storms by Wisconsin point.

(*Continued from page five.*)

A Beck steam steerer was placed on the V. O. T. tug Union last week, and was given a trial Saturday evening and worked splendidly. The V. O. T. tug Protection is getting a Beck steam steerer placed on her this week.

The schooner Cuyahoga, with lumber from Snow Island was caught in the heavy gale off Chicago Friday night, which caused her to spring a bad leak. She came to an anchor in the inner harbor Friday night and remained there until Saturday morning, when the tug Waubun pumped her out and towed her up to the lumber market, where she lay on the bottom water-logged until Tuesday morning, when she was again pumped out and towed to a dock to unload.

About 10 o'clock Tuesday morning the schooner Eveline Bates, laden with ties, when going up the river in tow of the tug Commodore Barry collided with Lake street bridge, the schooner's jibboom, head gear and foremast was carried away and her jib topsail torn. The railing and sidewalk of the bridge received considerable damage. The bridge is out of repair and would not open until the schooner's mast struck it, when it turned and let her through.

The steamer Nebraska arrived back from Ludington Saturday morning at 2 o'clock. Whilst on her way to Ludington Wednesday night, when about 10 miles off that port the air pump of her starboard engine broke down and she made Ludington with her port engine. On here return here she came along with her starboard high pressure cylinder and port engine, repairs were made to her pumps here by Robert Tarrant, and she left on Tuesday for Milwaukee, where she will receive alterations, and improvements to fit her for the passenger traffic in which she is to be engaged.

The schooner Bay State, of Chicago, which went ashore last week on Bark Point, was released and towed by the tug Monarch to Manitowoc, where she will be repaired by H. B. & G. B. Burger, shipbuilders.

At J. B. Bates & Co.'s shipyard the schooner York State received a new centre board, the steamer Aztec some repairs, they will give the schooner Eveline Bates a new jibboom and sprit-sail-yard.

The schooner Skylark, with plaster from Alabaster arrived at South Chicago Friday morning. She encountered a heavy gale on Lake Michigan, and sprung a leak and was assisted to South Chicago by the wrecking tug Manistique.

The Grummonds Line wrecker, Manistique, Captain Frank H. Danger, arrived at South Chicago, on Saturday morning, with the schooner Skylark, having picked the vessel up in a sinking condition on Lake Michigan.

Stewart Murray, formerly agent of the Lehigh Valley Transportation Co., at Milwaukee and later at this port has been appointed resident agent of the Northern Steamship Co. at Minneapolis.

The new whaleback steamer Thomas Wilson, arrived at South Chicago, this week with 3,000 tons of ore from Lake Superior on a draft of 14 feet 5 inches. Captain Thomas Wilson, of Cleveland, in honor of whom the whaleback was named should certainly be satisfied with her excellent carrying capacity.

One of the Dobbins patent life boats was received at the Michigan City life saving station July 4th., and was given a trial in the presence of the worthy captain, her inventor. She is 32 feet long, with 6½ feet beam, and is self-righting, self-bailing and un-submergable. She is lined with cork inside along the bilges forward and aft and has 42 water tight compartments, a tank for water on each side of the centerboard and water tight bulkhead at each end. She is an eight-oared boat and the life-saving crew feel very proud of her. The crew went out with their surf boat Friday afternoon and rescued two men who got caught in the heavy gale when out rowing in a small boat.

WILLIAMS.

A LIGHTSHIP ON ELEVEN FOOT SHOAL.

Special Correspondence to The Marine Record.

ESCANABA, MICH.—The schooner Bay State, lumber laden, bound from Manistique to Chicago, ran on the rocks at Point Aux Barques, last Wednesday. The wrecking tug Monarch left her station here on Friday and proceeded to release the stranded schooner. A 14 inch pump was put aboard of her and she was then towed to Manitowoc. The Bay State was built at Buffalo in 1855 and measures 249 tons. She is owned by Peter Nilson, of Chicago.

The wrecker Henry W. Johnson, of Detroit was here last Thursday. She is engaged in raising the steamer Ogemaw which sunk off Burnt Bluff, Big Bay de Noc, last fall. It will be remembered that the Ogemaw's decks were reported as being blown up at the time of sinking, but the latest report is that she lies in ten and one-half fathoms, slightly listed to starboard with decks whole. There are queer remarks about the case.

The largest cargo of iron ore ever carried through the St. Clair Flats was taken on by the steel steamer Roman, of Menominee Transit Co.'s fleet last week. She left this port Thursday with 3018 gross tons consigned to Cleveland.

The Lightship stationed on the Eleven Foot Shoal is furnished by the Burns Transportation Co., of this port with Walter Morton and Wm. Hart as keepers. She displays a red light over a white one and during thick or foggy weather her steam whistle peals forth two blasts every four minutes three times in succession and followed by four long blasts.

The Pig 117 left this port Friday with 2800 tons Kelly ore from the Sheridan mine at River Iron.

Escanaba is to have a new city directory, Jas. Medbury, will superintend the work and free delivery mail service will immediatly follow. The city of Gladstone will be included in the volume.

The coal office has been removed from the Merchant Wharf warehouse to neat quarters erected opposite the scales on the inner side of the wharf.

Captain Hawkins, of the schooner Belle Hanscomb, was taken to the hospital last week, with symptoms of typhoid fever. Captain Geo. Albright took command of the Belle until Captain Hawkins rallied and we are pleased to note that he is now feeling as well as ever.

On the return of the Hanscomb, from her trip under Albright the union crew, who had run her all this season, thinking they were masters of the situation, refused to get the anchor, whereupon the captain made complaint to shipping master Nesbitt who immediately supplanted the old union men with an entire crew of non-union men, and now all is as it should be aboard the Belle Hanscomb.

The Grummond Line tug John Owen, was met by Sheriff McCarthy on her arrival here. It seems the sheriff supposed he "had them foul," but the genial Captain Carney proved himself and crew free from any such conduct as the Owen left here fully twenty-five hours previous to the occurrence.

That 40 mile pig iron boat, of Marquette glory, took a cargo of pig from this port last week. She is a neat and trim little craft all right, but the Marquette man meant three hours when he said forty mile boat. The Pioneer is owned by the Cleveland Cliffs Iron Co.

The steamer Nellie is now laid on the shelf.

Are you in it? asks a postal card we noticed last week. We would ask each of you personally, are you in it? Where's your Ad? Do you expect to do business with the lake marine and yet dwell in the past? Come to the front rank I say and where's your Ad?

UNO.

THE "LUCERNE" WILL NOT BE RAISED.

Special Correspondence to The Marine Record.

DULUTH, Minn.—The steam whaleback Pathfinder, for the Mather syndicate, was launched Saturday p. m. according to program, in the presence of a goodly number of spectators. She is a veritable whale, as she will carry 4,000 tons on 16 feet draft and is 360 feet over all.

A sad accident occurred Sunday to a little pleasure steamer in the bay that has called up a sharp investigation. The boat was the Bruno, carrying passengers from the city to a point about 4 miles down Minnesota Point. Being a light draft narrow craft the channel along the western side of Minnesota Point was used, and about 3 miles from the docks the old dyke had to be crossed. Through the dyke is a passage about 40 feet wide, marked on one side by a half sunken crib turned in the direction of the channel and surmounted by a post and cross, and on the other by a small pile of stone. The captain of the boat Camera had given the wheel into charge of her owner, Daniels, and was collecting fares, when she ran on the pier, heeled over and slid off, taking in a good deal of water. One passenger was thrown off and was hit by the propeller, sustaining internal injuries, besides having a leg and several ribs broken. He was taken to a hospital, but soon died.

The Ashland wreckers who have been seeking the lost Pewabic returned to Ashland to try an easier job on the iron ore laden schooner Lucerne lost several years ago off Chequemagon Bay. The patent diving suit of Oliver Pelkey, of this city, was used, and the diver claims to have gone down 145 feet. He found the Lucerne, but she was so badly broken up and so deeply imbedded in sand and iron ore from her cargo that all attempts to lift her will be given up.

Wheat rates are rather quiet to Buffalo and for a week have been ranging about 3 to 3¼ cents. Kingston vessels were had at a low figure, several cargoes being placed at 3¼ cents. Ore rates from Ashland and Two Harbors have not changed nor are coal rates up any different from a week ago. Local wheat receipts continue large, having amounted to 700,000 bushels last week. Shipments do not decrease the stock greatly and it will probably be 3,000,000 or more when the new crop starts.

The Minnesota Iron Co. will ship about 675,000 tons from now to the close of navgation of this two-thirds is contracted for and the rest soon will be. Should iron ore rates remain as now this total will be increased by 150,000 tons, making the year's shipments a full 1,250,000 gross tons. So far the company is 125,000 tons ahead of its shipments at this date last year.

DWIGHT E. WOODBRIDGE.

THE LOCAL FREIGHT SITUATION.

The Ashland rate has been raised from $1.10 to $1.15, by the increased movement in wheat during the past week. The Escanaba rate was still 70 cents last evening, but with more prospects of 75 cents being reached than there was last week, due this time to a difference in the circumstances which ordinarily affect the rate. The Milwaukee coal rate is 60 cents and others are unchanged. Three and one quarter cents is being freely paid from Duluth.

NOTICE TO MARINERS.

CORUNNA BACK RANGE LIGHTHOUSE BURNT DOWN.—The back range light at Corunna, on the River St. Clair, was burnt down on the 15th inst. Until a new tower can be erected a temporary light will be shown from a lantern hoisted on a pole 40 feet high.

SHOAL REPORTED NEAR PELEE POINT—Mr. W. A. Grubb, lightkeeper at Pelee Point, near the west end of Lake Erie, in the County of Essex, Ontario, reports the existence of a shoal about three miles W. N. W. from his light station (the Dummy). He states that this shoal lies about half a mile north west from the spot marked 19 feet on chart No. 490, and has on it two 13-feet spots, one composed of stone and boulders, the other made by a wreck, probably that of the schooner Nichols, sunk 10 or 12 years ago, laden with iron ore. The position of this shoal requires verification.

BARRIFIELD COMMON RANGE LIGHTS—Two range lights, established by the Government of Canada on Barrifield Common, near the junction of Great Cataraqui Creek and the St. Lawrence River, at the outlet of Lake Ontario, in the County of Frontenac and Province of Ontario, to guide between Four Mile Point and Kingston Harbor, were put in operation on the 13th. inst. The buildings are iron skeleton towers, triangular in plan, with oval, slattered targets or beacons at their tops, and sheds at their bases.

The beacons are white, the iron frameworks red, and the sheds brown.

The lights are fixed white, shown from locomotive headlight lanterns hoisted to the tops of the tripods, and visible 12 miles over a small arc on each side of the line of range.

The front range building stands 370 feet east from the end of the bridge over Great Cataraqui Creek, and is 50 feet high. Latitude N. 44° 14′ 4″ longitude W. 76° 28′ 24″. The light is elevated 48 feet above the lake level.

The back range light tower stands 1,500 feet North-east Northerly (N. 36° 40′ E. true) from the front one. It is 80 feet high and the light elevated 75 feet above the lake level.

WM. SMITH,
Deputy Minister of Marine and Fisheries,
DEPARTMENT OF MARINE AND FISHERIES,
OTTAWA, CANADA, 27th June, 1892.

☞ All bearings are magnetic and are given from seaward, miles are nautical miles, heights are above high water, and all depths are at mean low water.

Pilots, masters, or others interested are earnestly requested to send information of dangers, changes in aids to navigation, notice of new shoals or channels, errors in publications, or any other facts affecting the navigation of Canadian waters to the Deputy Minister of Marine, Ottawa, Canada.

NOMENCLATURE.

Capt. James Davidson, of Bay City, Mich., is doing excellently well in his system of naming the fleet of steamers turned out at his yard. We learn that he will follow the same course pursued by him last year and name the new boats after noted cities of the world. The boat launched a few days ago is called the City of Venice; the one to be launched Saturday will be called the City of Genoa, while the one to be launched ater on will be called the City of Naples.

THE stern wheel tow boat George S. Ross, of Ford City, is said to be the fastest boat on the Allegheny River. She is 20 feet beam by 120 feet long with a pair of horizontal engines having cylinders 10½ inches diameter by 44 inches stroke. She makes 44 revolutions per minute cutting off at half stroke. The boiler is one of the celebrated Roberts water tube boilers occupying a space of only 5 by 7 feet and having 21 square feet of grate surface and 700 square feet of heating surface. It easily furnished all the steam required by the engines and is very economical in fuel, burning soft coal.

THE second electric search light has now been fitted on lake steamers, both are in the passenger trade. The first steamer to adopt this aid was the new twin screw passenger steamer Virginia of the Goodrich Line, and the second one is the Pilgrim in the passenger trade out of Buffalo.

UNITED STATES DISTRICT JUDGE DEADY, of Portland, Ore., has rendered a decision in the salvage suit of the steamer Zambesi against the whaleback steamer Charles W. Wetmore. The decision awards $20,000 to the Zambesi. The amount sued for was $250,000.

SENATOR WASHBURN has presented the protests of the city council and chamber of commerce of Duluth, urging the passage of the bill authorizing the construction of a bridge over the St. Louis river from Rice's point, Duluth, to Connor's point, Superior, Wis.

Correspondence.

FLOTSAM JETSAM AND LAGAN.

THE EDITOR THE MARINE RECORD.—Will you have the kindness to answer in the columns of THE MARINE RECORD under the head of flotsam, jetsam and lagan: First—How far does the navigation line extend off shore, or better. what can a person understand by "navigation lines?" And second: What privilege has a person on his lake front in regard to building a dock, driving trap nets or other similar obstructions? Your reply will oblige a Lake Huron subscriber.

To the first query we would say that there is no such a line known as a or the "navigation line." Local river and harbor lines are established at various ports by the Corps of Engineers U. S. A., under authority of the Secretary of War, there is also the national boundary line of one league, but of this more may be known after the Bering Sea controversy is brought to a close, the international boundary line between the United States and the Dominion of Canada traverses a portion of the lakes, but has no relation to a navigable line.

The second query is answered by stating the riparian right, and privileges of the ownership of river or lake front property is practically unlimited up to the point of obstruction to common rights, or until such has become a menace to navigation or the free transportation over a common highway, depth of water or off shore limits do not enter into the question only in so far as they may effect the boundaries mentioned in the first question. The saving, binding and penal clauses of the River and Harbor Act of Sept. 19, 1890 hinge upon "whatever may tend to impede or obstruct navigation," and up to that point the riparian rights on the lake front can only be limited to the extent of a person's bank account.

A "BOGUS" MESSAGE.

CHICAGO, July, 16.

To The Marine Record.

In regard to "a message from Lake Erie" published in your issue of July 14 according to your Ashtabula advices, permit me to say that it is a piece of buncombe. The crew of the Finney were. Capt. Riordan, mate George Chistianson, W Smith, S. Stacey, J. Conway and H. Porter seamen, Pat McCarthy was not in the schooner at all. We knew the crew and their names that shipped in her at the time she was lost.

T. J. ELDERKIN.
Seamen's Union.

[Only a grossly ignorant or thoughtless person would be guilty of perpetrating such a "joke," and as Mr. Elderkin was president of the Seamen's Union at that time we see no reason to doubt his views.—ED.]

INVESTIGATIONS INTO THE CAUSES OF MARINE CASUALTIES.

In our issue of June 16th the need of an official board of inquiry on wrecks, strandings and other serious marine casualties was pointed out, since which time the U. S. Commissioner of Navigation has taken the subject under advisement with an energy that bodes well for the ultimate adoption of such measures as will lead to a knowledge of the primary causes of the more serious marine casualties.

In our issue of June 30th this subject was further dealt with, and it was there shown that owners need feel no alarm on account of the findings of such an inquiry vitiating any damage claims that might be brought before a court of admiralty, as the entire course would be from greatly different standpoints, in so far as technical, commercial, and legal issues depend. To further cover this ground there is now a bill before Congress concerning contracts of common carriers, which, among other things, relieves vessel owners of responsibility for damage to cargoes resulting from error in judgment in navigation or management of the vessel, provided it is shown that the vessel was, in all respects, seaworthy and properly manned and equipped in starting on her voyage. And it is certainly the shipowner's part of the bargain to see above all else that his vessel is well equipped for the voyage. A feature, by the way, in which the lake marine exhibits an especial pride.

If, however, the representatives of the U. S. mercantile marine and the Treasury Department, through its several bureaus, strenuously object to any inquiry being held in such cases, there still ought to be some plan evolved for obtaining statistical facts in relation to the loss of life and floating property under the United States flag.

From the wreck chart of the Great Lakes, compiled by special marine agent Dr. H. J. Penrod. of the Weather Bureau, Department of Agriculture, at the instance of Professor Mark W. Harrington, Chief of the United States Weather Bureau, it is learned that 147 vessels, valued at nearly $3,000,000, and 257 lives, were lost between 1886 and 1891 on the lakes alone, the cause assigned "being general stormy weather conditions," only abandoned and totally wrecked vessels being mentioned, while the long list of serious casualties are left untouched. This, of course, is a Weather Bureau summary, as there are specific reasons underlying each and every casualty, there being but few cases of thoroughly equipped, well handled, seaworthy vessels being totally overborne by the weather conditions alone.

In an editorial on the subject of marine casualties the New York "Maritime Register," of July 13th, contained the following summary of the steamboat inspection service, in so far as their functions as steamboat wreck commissioners are concerned, and every word of which is substantially accurate and to the point:

"In each steamboat inspection district the local steamboat inspectors make the investigation into the causes of every casualty to a steam vessel. This is part of their duties as Government officers. Their work of this kind is probably heaviest in the district in which this port is situated. And their way of making the examination here is of the most unsatisfactory character. Overburdened with work connected with their legitimate duties as inspectors, they cannot spare any too much time for inquiries into disasters, and coming to this duty with prejudiced minds as they necessarily must, they cannot give decisions which others interested can accept as true and unbiassed. In fact, this whole maritime casualty examination business as now carried on is a delusion and a snare and serves no good purpose whatever. It could not be in worse hands. This is said without reflection upon the men themselves, but upon their work in attempting to play judge, jury and party on trial, for they make many of the rules which govern steam vessels and grant the certificates of inspection under which the vessels and officers sail.

It was a mistake from the beginning to make the Steamboat Inspection Service also a Wreck Inquiry Court, for it is practically that. The work connected with inspection service and supervision was sufficient and difficult enough to occupy the time and ability of experts. To give inspectors also power to judge the correctness of their own acts in contention with others, and to be the only examining authorities in cases where both life and property were damaged through causes for which they as much as other people might be to blame, was more than blunder. The act under which they are thus made a tribunal may be legal, but it is unjust, inequitable and harmful. It places the inspectors themselves in a false position. It leaves officers and owners of steam vessels with small chances of fair trial in cases of casualties.

We have often pointed out the injustice of this kind of inquiry into the causes of marine casualties. The fact that inquiry is made at all shows the belief that it is necessary and proper. But what we never could understand is why it was confined solely to vessels and officers of the steam marine. There was no way of conducting such inquiries until the existence of the Steamboat Inspection Service offered apparently a means of reaching the steam vessels. The result, however, has not justified the use of this lumbering and decidedly unfair means.

It is evident that a better protection for all concerned, public, shipowners, officers and men, can be secured by establishing independent wreck inquiry courts whose duties shall be confined entirely to the work that their title covers. It is beyond the question to say that no investigation of this kind is at all necessary, that shipowners should not be subjected to such constraints: Where risk of life and property involves others beside the one person, some protection must be given for all as against each other. This is the basis of all police and sanitary laws and it applies particularly to shipping as being property of a semi-public kind. Upon the point of necessity there should be no debate. It is really the question of finding the best means to secure an impartial inquiry into the causes of maritime casualties, to sail as well as to steam vessels. By means of such inquiries, the causes of casualties would be more fully stated, censure placed where it properly belonged, and preventable causes lessened through the efforts that would naturally follow to remove them as far as possible. As we have frequently suggested the advisability of establishing such an inquiry board, it is gratifying to hear from Washington that the Bureau of Navigation writes for data upon this subject and suggests that some means of obtaining full information about wrecks should be established. We are glad to see that the Bureau of Navigation is on the right tack. Wreck Inquiry Courts will give all the information needed, and Commissioner O'Brien cannot do better work than to try and secure the proper legislation toward establishing such Courts."

ST. MARY'S FALLS CANAL.

From the annual statement of traffic through the St. Mary's Falls canal compiled by Supt. E. S. Wheeler for the year ending June 30th 1892 it is learned that on September 16 and 17 there were unusual fluctuations, the water rising and falling 3 feet 7 4 5 inches in three hours. The mean elevation of the surface of the water below the lock, for the month of April was 581 and 79 100 feet which is 3-10 of a foot lower than ever before during the season of navigation.

Total time during which the lock was operated, 3,860 hours 8 minutes; total time spent by vessels in the lock, 6,833 hours 10 minutes; average time spent by vessels in passing lock 36 minutes.

The total freight exceeds that of any other fiscal year by 1,768,622 tons. During the calender year 1891 totat amount of freight paid was $9,849,022.31, or a cost of 135-100 mills per ton per mile, including cost of loading and unloading. Average distance that freight was carried, 820 4-10 miles.

The greatest number of miles run during the season of 1891 was 43,167 by the propeller Mariska, of the Minnesota Steamship line; the greatest amount of freight carried is credited to the propeller Castalia, of Cleveland, O., averaging 68,943 tons. The greatest number of mile-tons for the season is to the credit of the propeller Northern Queen, of Buffalo, namely, 60,899,000. During the previous season this boat carried 68,794,994. The largest single cargo carried by any vessel is credited to the propeller E. C. Pope, and amounted to 3,136 tons; the largest by any sail vessel was 2,950 tons, on the tow barge 111.

LIGHTSHIP No. 53, last of the four constructed by Wheeler & Co., of West Bay City, for the Atlantic coast service, was launched last Wednesday. She is destined for the shoals off Cape Fear, and will be completed in about five weeks.

SHIP BUILDING AT DETROIT.

The handsome passenger steamer Wyandotte, built by the Detroit Dry Dock Co., for river traffic was successfully launched last Saturday, she is a steel built vessel and will develop good speed. The large freight carrier now building at Wyandotte to the order of the Shaw-Eddy Co., is well along in point of construction and the Chicora a new passenger steamer for Graham & Morton's Lake Michigan route as well as the freight steamer Mahoning for the Anchor Line are receiving their finishing work at the Detroit yard, a large new double ender railroad transfer ferry steamer is being built to go on the route with the ice crusher St. Ignace in the Straits of Mackinaw.

UNITED STATES Court Commissioner at Marquette, Mich., is taking evidence in the case the A. Booth Packing Co. vs. the schooner H. P. Baldwin, libeled at Manistique last October. The schooner had been found abandoned by the Booth company's tug shortly after a heavy storm. She was rapidly filling with water, and was towed to Manistique. There the crew, which had abandoned her, came on board and drove off the rescurers. Claim was made for salvage and payment refused, whereupon she was libeled. The case has now assumed a very complicated form.

Maritime Law.

District Court, E. D. Wisconsin, May 16, 1892.

1. SALVAGE—CONTRACT.

A contract to pay for salvage service a fixed price absolutely, without respect to success or failure, does not change the character of the service. It remains a salvage service, but the measure of compensation is guaged by the contract, and not by the danger encountered, or the value of the property salved.

2 SALVAGE—JURISDICTION—LIEN.

A contract to pay a fixed price for a salvage service, in any event, does not affect the admiralty jurisdiction, nor the lien granted by the maritime law for salvage service.

3. SALVAGE—FRAUDULENT CONTRACT.

A contract between the salvors and the owner of the ship, for a fixed sum payable in respect of the ship, and for a larger sum payable in respect of the underwriters, is tainted with fraud, and will not be enforced.

4. SALVAGE—MASTER'S CERTIFICATE—FRAUD.

Settlements by the master, deliberately and fairly made, are upheld. But such settlements, made pursuant to and in furtherance of a contract to defraud underwriters, will not be sustained.

5. SALVAGE—INEFFICIENCY OF WRECKING OUTFIT—HIRING BY THE DAY.

Compensation cannot be abated for efficiency of wrecking material hired at a fixed price by the day, and subject to discharge at the will of the master. Retaining the service, the contract compensation must be paid.

The libel was filed *in rem*, in a cause of salvage, to recover the reasonable worth of the service. At the hearing it was amended to comprehend a contract in the nature of salvage, and to assert a specific contract for the use of two pumps at an agreed rate of $45 and $35 per day, respectively. The libel also asserted an accounting with the master and the owner, and certification of the libelant's claim by the master with the consent of the owner. The answer, *inter alia*, asserts that at Sheboygan the libelants' claim was upon the express agreement that a deduction of 40 per centum should be made from the charges for the use of the pumps, and that prior to the filing of the libel, the proper amount under such ageeement had been offered to and refused by the libelants. The answer also asserts unnecessary delay and misconduct on the part of the libelants, and that the pumps were inefficient, and in bad order and condition, and unfit for the service contemplated. The claimant also insists that the contract service alleged in the amendment to the libel is not a proper salvage claim, and not cognizable in the admiralty as a maritime lien; and also that the libelants and claimant are residents of the state of Wisconsin; that the contract for the services rendered was made at Sturgeon Bay, in the state of Wisconsin, and credit is therefore presumed to have been given the owner, and not the vessel; that a lien for such services can arise only when the debt is created within a state jurisdiction other than that in which the owner resides or to which the vessel belongs.

I am persuaded by the proofs that there was an agreement for a rebate. Whether or not the rate agreed upon was 40 per cent. may admit of doubt. It would seem unnatural for Leatham to assent to a deduction which would abate his compensation for the use of the pumps, to that date, as conceded by the libelants, by some $256, exclusive of all compensation as engineer; and this without any resultant benefit to himself, and solely to enable the claimant to recover a lesser amount from the underwriters. If that was the rate agreed upon, it indicates either a lack of discernment and inattention to self-interest not apparent from the appearance of Leathem in the witness box, or a generous impulse growing out of the "hard luck" attending the raising of the ship. The latter seems the only probable motive for such an agreement by him. It is not necessary to determine the fact

It suffices that there was an agreement for a rebate, whatever the rate. This agreement was suggested by Leathem to the claimant with a view to the latter obtaining from the underwriters of the cargo a larger salvage than he ought. I think it was accepted with like intent and purpose on the part of the claimant. His avowed reasons for acceptance impress me as uncandid. Leathem suggested, "It is an insurance job; we have got to get these bills as high as we can." The claimant demurred to the price stated, asserting that they were not according to the contract. Leatham said, "What is the matter with a rebate?" The claimant answered, "I listened to that readily, and said, 'All right.'" The master's version is that the owner replied, "Oh, that is different." All this occurred before any rate of rebate was suggested.

Such an offer is susceptible of but one interpretation. It was a bald suggestion to defraud the underwriters. The claimant's ready assent compels the conviction that he was quick to entertain the offer. Honesty does not listen to suggestions of fraud with such easy complacency, or yield with such ready assent. Honesty is more robust. I am satisfied that both parties conspired to perpetrate a fraud upon the underwriters. Indeed, it was asserted by counsel, at the bar, without dissent, that such agreements are not infreequent in cases of salvage, and that marine underwriters well understood that they were thus imposed upon. If insurance companies submit to such imposition, they are culpable, in a sense condoning the offense. Such contracts will not be tolerated in courts of justice. They will not consider them nor enforce them against either party. They will only deal with them in the way of relieving innocent victims of the frand, or of punishing the guilty participants therein.

It is urged by the libelants that the bill certified by the master should be held conclusive of the contract of hiring. Settlements by the master, when deliberately and fairly made, are upheld. *The Senator*, Brown, Adm. 545. This bill was, however, presented and certified pursuant to and in furtherance of the corrupt agreement considered. It is tainted with fraud, and cannot be sustained. It does not speak the agreement of the parties. It declares the fraudulent contract sought to be imposed upon the underwriters.

With respect to the claim to abatement of the amount due because of alleged want of good faith and skill on the part of the libelants, unreasonable delay in the work, and efficiency of the pumps, but little need be said. There was incompetency somewhere with respect to this work. It cannot otherwise be accounted for that so much time should have been consumed in raising the ship within a harbor and in smooth and shallow water. That incompetency, I think, rests with the master and owner, not upon the libelants. The latter were not engaged as wreckers, and were not in control of the work. They hired to the master their pumps, and operating service for one of them, at a *per diem* compensation. They were subject to discharge at any time at the will of the master. He, not they, controlled the operations. If the pumps were inefficient, or Leathem unreasonably prolonged the work, the master had the remedy in his own hands. He could put an end to the employment at will. Retaining the service, the claimant cannot refuse compensation, or claim abatement of the contract price. I pronounce for the libelants upon the basis stated, with interest from the date of filing the libel, and for costs. Fed. Rep. Vol. 50, pp. 575.

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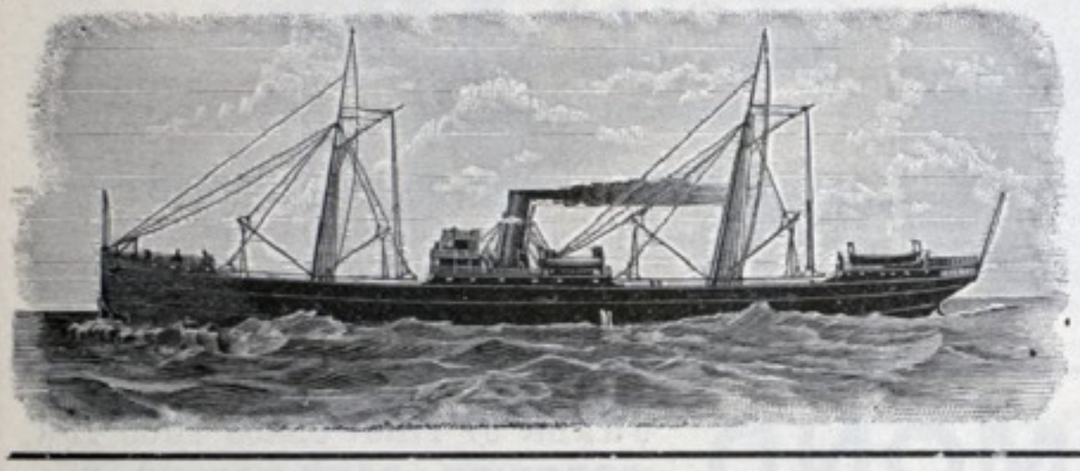

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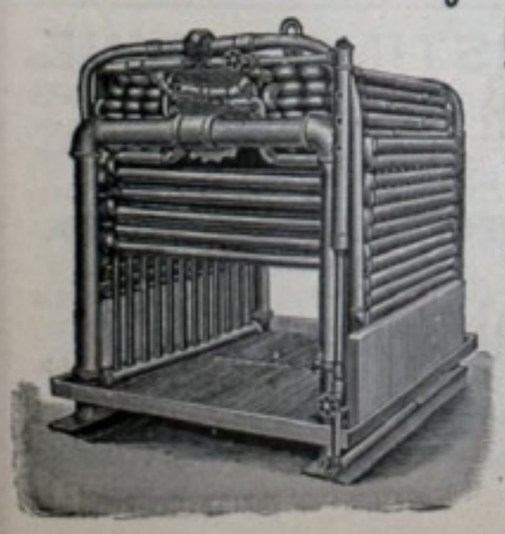

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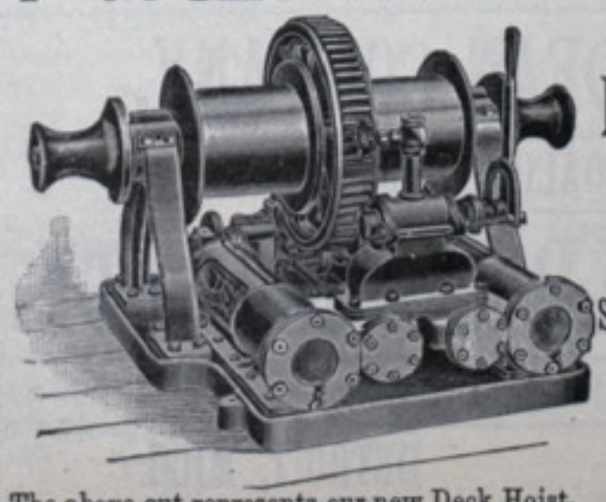

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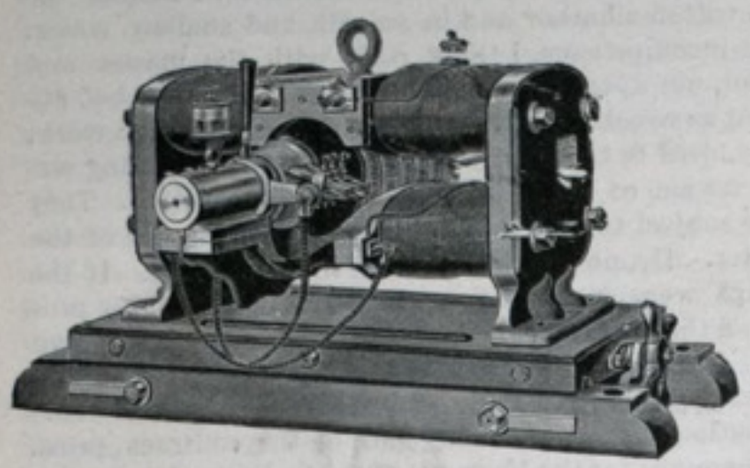

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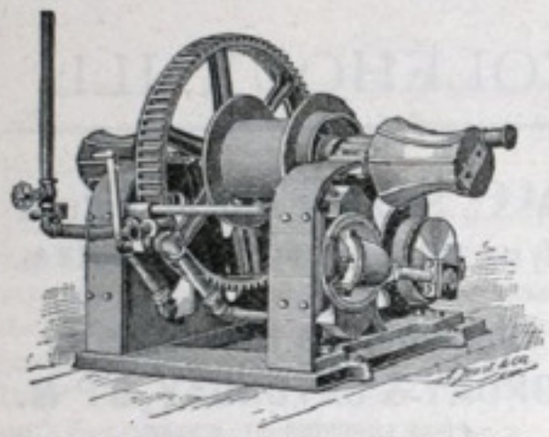

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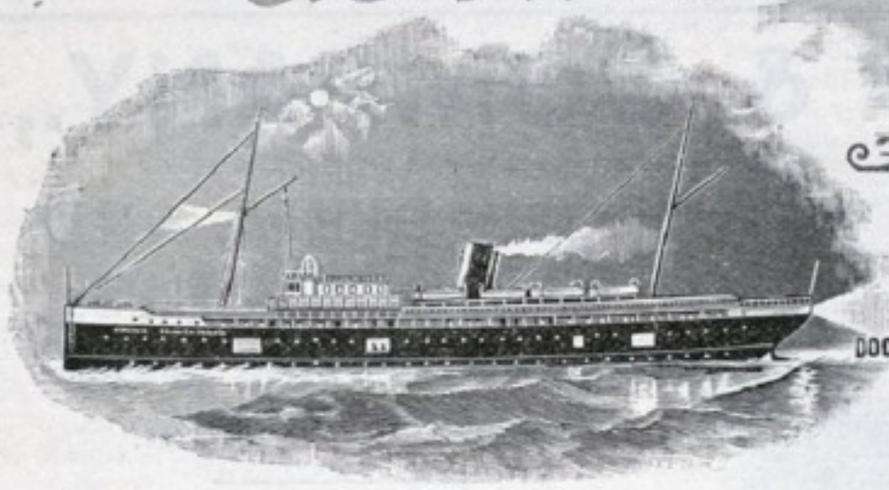

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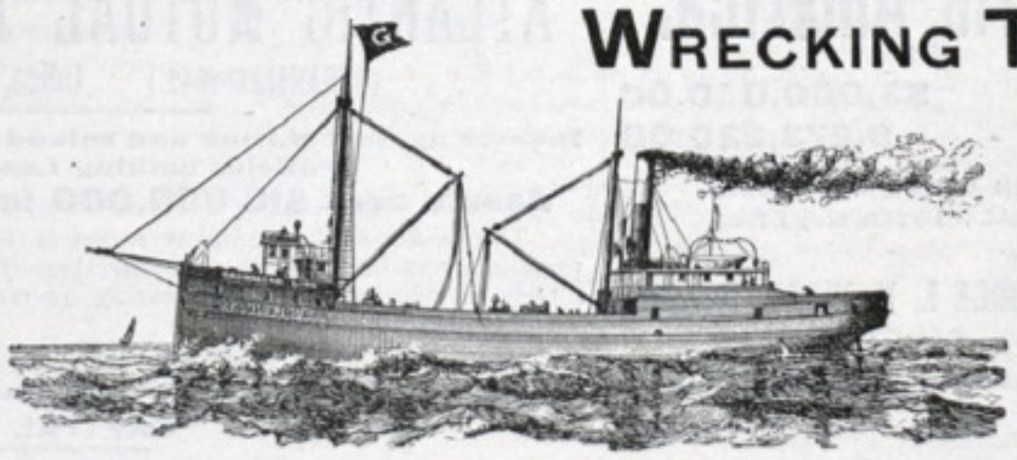

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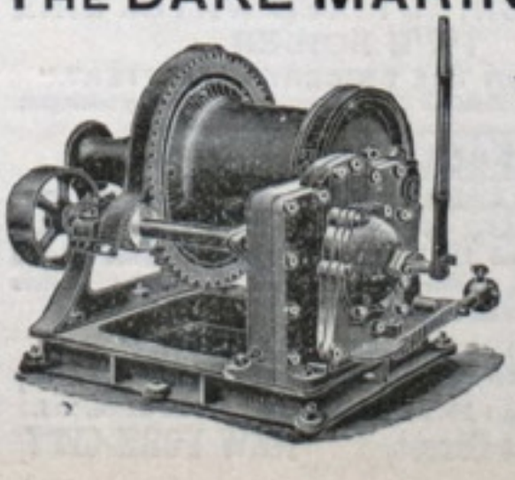

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